

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION
SPONSORED PROJECT INITIATION

Date: April 16, 1976

Project Title: Computer Program for Track-While-Scan (TWS) Radar System Modeling and Evaluation

Project No: A-1795

Project Director: Mr. B. C. Appling

Sponsor: Naval Surface Weapons Center; Dahlgren Laboratory; Dahlgren, VA. 22448

Agreement Period: From 12/3/75 Until 4/20/76

Type Agreement: Contract No. N60921-76-C-A105 (Fixed-Price)

Amount: \$16,044.00

Reports Required: Progress Reports

Sponsor Contact Person (s):

Technical Matters

Mr. S. Leong/Mr. R. Giacomo
SIRCS Program Manager

Contractual Matters

(thru OCA)
Ms. K. Mason
Contract Negotiator

Naval Surface Weapons Center
Dahlgren Laboratory
Dahlgren, VA 22448
Phone: (703) 663-7478

Defense Priority Rating: DO-S1 under DMS Reg. 1

Assigned to: Applied Engineering (~~School~~ Laboratory)

COPIES TO:

Project Director
Division Chief (EES)
School/Laboratory Director
Dean/Director-EES
Accounting Office
Procurement Office
Security Coordinator (OCA)
Reports Coordinator (OCA)

Library, Technical Reports Section
Office of Computing Services
Director, Physical Plant
EES Information Office
Project File (OCA)
Project Code (GTRI)
Other _____

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION
SPONSORED PROJECT TERMINATION

Date: April 27, 1976

Project Title: Computer Program for Track-While-Scan (TWS) Radar System Modeling and Evaluation

Project No: A-1795

Project Director: Mr. B. C. Appling

Sponsor: Naval Surface Weapons Center

Effective Termination Date: 4/20/76

Clearance of Accounting Charges: 4/30/76

Grant/Contract Closeout Actions Remaining:

- ☒ Final Invoice and Accounting Documents (Fixed-Price) ASAP.
- ☐ Final Fiscal Report
- ☒ Final Report of Inventions
- ☐ Govt. Property Inventory & Related Certificate
- ☐ Classified Material Certificate
- ☐ Other _____

Assigned to: Applied Engineering (~~School~~/Laboratory)

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Project Code (GTRI)
Other _____

Candy note
Final Report attached
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ENGINEERING EXPERIMENT STATION

GEORGIA INSTITUTE OF TECHNOLOGY • ATLANTA, GEORGIA 30332

12 January 1975

Commanding Officer
Naval Surface Weapons Center
Dahlgren, Virginia 22448

Attention: Ms. A. Kathryn Mason
Contracting Office

Subject: Research and Development Status Report No. 1
"Computer Program for Track-While-Scan (TWS) Radar
System Modeling and Evaluation"
Contract N60921-76-C-A105
Covering the Period 3 December through 31 December 1975

Gentlemen:

This is the first monthly progress report for Contract No. N60921-76-C-A105 in accordance with sequence number A001 of Exhibit A, Contract Data Requirements List, of RFP No. N60921-76-R-A056.

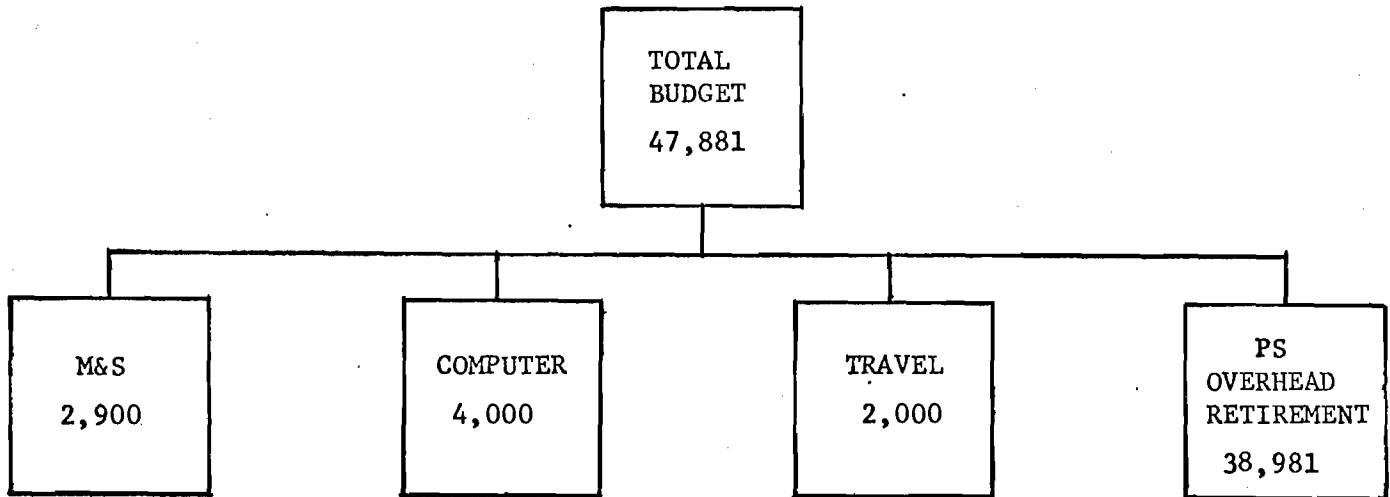
No problems are presently foreseen in meeting contractual requirements, schedule dates or funding constraints. The following pages provide more details. Georgia Tech personnel presently plan to visit with NSWC personnel at Dahlgren on Friday, 23 January 1976. The purpose of the meeting is to obtain information on missions and scenarios, proposed systems configurations, etc., and to provide a briefing on Georgia Tech's progress, plans, assumptions, and recommendations.

Contract Status

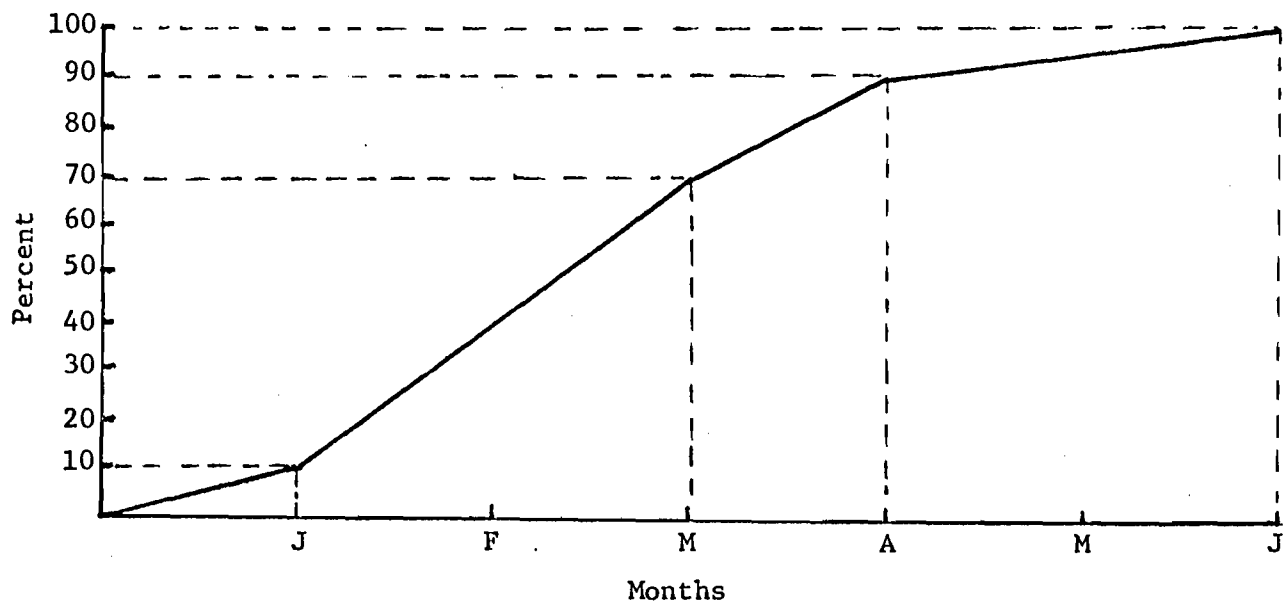
The effective start date of Contract N60921-76-C-A105 was 3 December 1975. Georgia Tech has assigned project number A-1795 and refers to the project as SIRCS. It has been previously agreed that only general level flow charts and not detailed flow charts, need be provided. Sufficient user documentation will be provided by general flow charts, user's guide comments, listing comments, and explanations in reference reports and handbooks. It is therefore requested that Data Item Description No. DI-H-5201 of RFP No. N60921-76-R-A056 and the contract be corrected by deleting the reference to detailed flow charts.

Financial Status

The diagram below shows the way in which the total budget of \$47,881 has been sub-budgeted at Georgia Tech.



The following chart indicates the expected rate of funding expenditures.



Technical Status and Work Summary

The following PERT chart provides a rough breakdown of the tasks and shows their relative dependency. Events that have occurred are crossed out. Ongoing activities are those necessary to achieve the next sequential uncrossed events. These activities may be determined from the chart but are listed below for convenience.

Current Activities:

1. New STREAM routines being modeled.
2. Modeling and programming for converting STREAM from bore-sight to TWS data rate and format being modeled and coded.
3. RG CALC program is having several minor deficiencies corrected.

Schedule

The schedule is indicated by the enclosed bar chart entitled SIRCS SCHEDULE. As can be seen, by the darkened areas of the bars, commencement of the modeling for updating RG CALC and LOBE PLOT is slightly behind schedule.

Respectfully submitted,

B. C. Appling
Project Director

BCA/fb

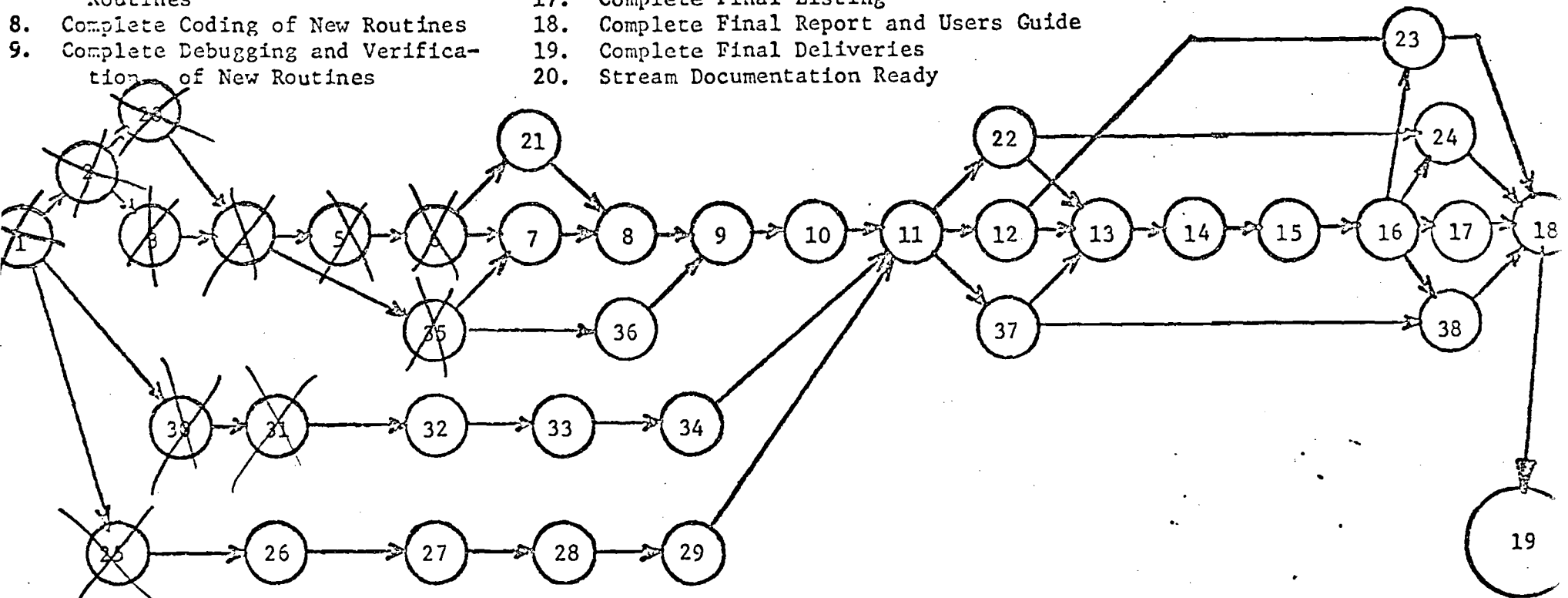
Enclosure

Approved:

J. L. Eaves, Under
Radar Technology Division

1-5-76

- | | | |
|---|--|--|
| 1. Commence Work | 10. Complete 3 Months Version of Stream | 21. Start Coding of New Routines |
| 2. Establish Status of Stream | 11. Complete 3 Months Version of Program | 22. Complete 3 Months Version of Flow Charts |
| 3. Stream Program Ready | 12. Complete 3 Months Version of Listing | 23. Complete Final Listings |
| 4. Start Stream Mods | 13. Complete 3 Months Version of Users Guide | 24. Complete Flow Charts |
| 5. Narrative and Mathematical Description of New Routines | 14. Complete 3 Months Deliverables | 25. Establish Status of RGALC |
| 6. Start Modeling New Routines | 15. Cutoff Date for User's Comments | 26. RGALC Program and Documentation Ready |
| 7. Complete Modeling of New Routines | 16. Complete Final Version of Programs | |
| 8. Complete Coding of New Routines | 17. Complete Final Listing | |
| 9. Complete Debugging and Verification of New Routines | 18. Complete Final Report and Users Guide | |
| | 19. Complete Final Deliveries | |
| | 20. Stream Documentation Ready | |



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|---|---|
| 27. Start RGALC Mods and Description | 36. Complete Mod to Convert from Boresight to TWS Data Rate |
| 28. Complete Verification of RGALC | 37. Complete 3 Months Version of Tapes, Cards and Coding |
| 29. Complete 3 Months Version of RGALC | 38. Complete Preparation of Tapes, Cards and Coding |
| 30. Establish Status of LOBE PLOT | |
| 31. LOBE PLOT Program and Documentation Ready | |
| 32. Start LOBE PLOT Mods and Description | |
| 33. Complete Verification of LOBE PLOT | |
| 34. Complete 3 Months Version of LOBE PLOT | |
| 35. Start Boresight to TWS Data Rate Conversion | |

Effective Date 3 December 1975

SIRCS SCHEDULE

Termination Date 3 June 1976

December

January

February

March

April

May

December				January				February				March				April				May								
8	15	22	29	5	12	19	26	2	9	16	23	8	15	22	29	5	12	19	26	3	10	17	24	31				
Monthly Reports				1/3					2/3					3/3					4/3					5/3				
Program Reviews and Deliverables												3/3													6/3			
Christmas Holiday Season																												
												Finalization of Program, Documentation, Etc. and Include Comments																
Preliminary STREAM Tasks																												
Math and Narrative Description of New STREAM Routines																												
Modeling of New STREAM Routines																												
Coding of New STREAM Routines																												
Modification and Coding for Boresight-to-TWS Data Rate and Format																												
Debugging and Verification of STREAM																												
Preliminary LOBEPLLOT and RGALC Tasks																												
LOBEPLLOT and RGALC Mods Modeling and Coding RGALC and LOBEPLLOT																												
Debugging and Verification RGALC and LOBEPLLOT																												
Scenario Definition and Preparation of User's Guide																												